Paradox: The Nine Greatest Enigmas In Physics
A fun and fascinating look at great scientific paradoxes. Throughout history, scientists have come up with theories and ideas that just don't seem to make sense. These we call paradoxes. The paradoxes Al-Khalili offers are drawn chiefly from physics and astronomy and represent those that have stumped some of the finest minds. For example, how can a cat be both dead and alive at the same time? Why will Achilles never beat a tortoise in a race, no matter how fast he runs? And how can a person be ten years older than his twin? With elegant explanations that bring the reader inside the mind of those who've developed them, Al-Khalili helps us to see that, in fact, paradoxes can be solved if seen from the right angle. Just as surely as Al-Khalili narrates the enduring fascination of these classic paradoxes, he reveals their underlying logic. In doing so, he brings to life a select group of the most exciting concepts in human knowledge. Paradox is mind-expanding fun.

**Synopsis**

**Book Information**

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**Customer Reviews**

I enjoyed this book and found that it helped to clarify the paradoxes discussed in this book (see below). In doing so, it also provided a good overview of many of the conundrums that relativity theory and quantum mechanics have created. I give this book 5-stars and recommend it to people, like myself (a retired research metallurgist with a long ago exposure to modern physics in graduate school and further reading since I have retired), which have some understanding of the ideas presented in this book, but with the reservation that those with little or no background in the subjects covered are likely to view the book less positively. What is in this book—This book discusses the most
important paradoxes created by modern physics, plus two introductory chapters that discusses some logic paradoxes. The chapters and their content are as follows:

Chapter 1 – The Game Show Paradox – Monty Hall and how his knowledge of what is behind the three curtains alters the odds when he lets a contestant switch from their initial choice to another one.

Chapter 2 – Achilles and the Tortoise – Classical paradoxes and how they are resolved.

Chapter 3 – Olbers’ Paradox – Why is the sky not covered with stars, making the nighttime as bright as the daytime? The physics here is about the finite nature of the visible universe and the ideas concerning the beginning and expansion of the universe.

Chapter 4 – Maxwell’s Demon – The physics of the second law of thermodynamics is discussed in this chapter.

Chapter 5 – The Pole in the Barn Paradox - Special relativity and length contraction are discussed in this chapter.

Chapter 6 – The Paradox of Twins – This chapter focuses on special relativity and time dilation.

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